NUTRITIONAL NEEDS OF INIDIVIDUALS AND FAMILIES ACROSS THE LIFESPAN

Nutrition Issues and Adolescents Grade Levels: 9-12

Concept: Sources of Nutrition Information

Comprehensive Standard: 6.2 Evaluate the nutritional needs of individual and families in relation to health and wellness across the lifespan

Technical Standard: 6.2.4 Evaluate sources of food and nutrition information that contribute to wellness

LESSON COMPETENCIES:

- ? Identify criteria for determining reliable sources of nutrition and health information
- ? Distinguish between valid sources of nutrition information and nutrition misinformation

Anticipated Behavioral Outcomes:

? Students use reliable sources of nutrition and health information based on sound scientific research.

Resources Needed:

- Copy of *Believe It Or Not* transparency
- Copies of all handouts for students
- News items, brochures, magazine articles, etc. providing nutrition/health information enough for one for each student
- Internet access

References for teachers and students:

The American Dietetic Association (ADA) position paper, *Food and Nutrition Misinformation* (2002), can be accessed at http://www.eatright.org/Public/Other/index_adar0202.cfm

Nutrition Misinformation, an article written to help consumers spot nutrition misinformation is available from the Oklahoma State University Cooperative Extension Service at http://pearl.agcomm.okstate.edu/fci/health/t-3124.pdf

Another web site which offers links to nutrition information is *NutriWatch*, *Your Guide to Sensible Nutrition* at www.nutriwatch.org

A fact sheet, *Nutrition on the Internet*, that discusses guidelines for evaluating nutrition websites, is available from the Nutrition Information Resource Center at Clemson University at http://virtual.clemson.edu/groups/NIRC

The Quackwatch website has a wide variety of information at www.quackwatch.com

Background Information

Food and nutrition misinformation can have harmful effects on the health and economic status of consumers. Consumers must be able to discriminate between credible sources of nutrition information and nutrition quackery.

Accurate nutrition information is the result of application of the scientific method, have survived replication and peer review. Nutrition misinformation consists of erroneous information, a misinterpretation of food and nutrition science. The danger of misinformation is that it may be harmful to health or be used to fuel food fads and health fraud

According to the American Dietetic Association's *Nutrition and You: Trends* 2000 survey, consumers receive nutrition information from a variety of sources. The media are consumers' primary source of nutrition information, with television (48%), magazines (47%) and newspapers (18%) cited as the top three information sources. Other sources identified were books (12%), doctors (11%) and family & friends (11%). Dietitians (1%) and nutritionists (1%) were not frequently mentioned.

The Internet is another popular source of nutrition and health information. According to a Harris Interactive poll, an estimated 100 million consumers sought health information on the Internet in the year 2000, up from 70 million in 1999 (Wall Street Journal, 12/29/00). Adolescents frequently use the Internet for health and nutrition information. Researchers in New York state in a study of 412 ethnically diverse 10th graders found that 96% of these adolescents used the Internet and 49% used it to obtain health information (Borzekowski, D.L. and Rikert, V. (2001). *Adolescent cyber surfing for health information: A new resource that crosses barriers*. Archive of Pediatric Adolescent Medicine, 155, 813-17).

Terms to know (Definitions from Quackwatch website):

Quackery – the promotion of an unproven product or service. The operant word is promotion rather than intent.

Quack – generally defined as a pretender to special health-related skills

Fraud – an intentional perversion of truth for gain

Unscientific – contrary to scientific evidence

Nonscientific – not based on the scientific approach

Faddism – a generic term used to describe nutrition nonsense. Food faddists are characterized by exaggerated beliefs in the role of diet and nutrition in health and disease.

The Food and Nutrition Science Alliance (FANSA) made up of the American Dietetic Association, American Society for Clinical Nutrition, American Society for Nutritional Sciences and the Institute of Food Technologists has developed a list of ten "red flags" that signal bad nutrition advice. They are:

- 1. Recommendations that promise a quick fix.
- 2. Strong warnings of the dangers of a single product or regimen
- 3. Claims that sound to good to be true
- 4. Simplistic conclusions drawn from a complex study
- 5. Ideas based on a single study

- 6. Dramatic statements that are not supported by reputable scientific organizations
- 7. Lists of "good" and "bad" foods
- 8. Recommendations made to help sell a product
- 9. Recommendations based on studies without a peer review
- 10. Recommendations from studies that ignore differences among individuals or groups

The Oklahoma Cooperative Extension Service (Nutrition Basics: Evaluating Nutrition Information, 2000) suggests the following credible sources of information:

Learning Activities:

Middle School Level

- ? Use the *Believe It or Not* transparency/handout to introduce the concept of nutrition misinformation. Ask students if they believe the headline or not. Discuss the following:
 - What words make you doubt the headline?
 - What further information do you need to determine if the claim is credible or not?
 - What do the abbreviations stand for? Would knowing that be helpful in determining if the information is accurate?
 - Where do consumers see these types of headlines or claims? What sources of nutrition information can be trusted?
- ? Share the *Ten Red Flags That Signal Bad Nutrition Advice*. Ask students to use this list to evaluate the claims on the *Believe It Or Not* handout.
- ? Define quackery for students; then ask them to determine if any of the headlines would likely be considered quackery and discuss why.

High School Level

- ? Share headlines and news items from a variety of nutrition information sources including newspapers, magazines, brochures, etc. Ask students to quickly review the item they received. Discuss the following:
 - Do you think the information presented is accurate? Why or why not?
 - Who is the author of the article? What are their credentials?
 - Are scientific studies cited? If so, what information is provided about the study?
 - Are "nutrition experts" or "medical professionals" quoted? If so, what qualifies them as a "nutrition expert" or "medical professional"?
 - How can consumers know if nutrition/health information is accurate?
- ? Read the fact sheet, *Nutrition Misinformation*, from the Oklahoma Cooperative Extension Service (see reference list)
- ? Complete the activity "*Trust Me I've Got Credentials*" NOTE TO TEACHER: This activity could be expanded to include a discussion of careers in nutrition such as a registered dietician. The ADA website (see reference list) has a section on careers.

? Using the criteria for website evaluation on the *Web Site Evaluation Form*, ask students to compare information on dieting at two of the following sites:

www.ipower2000.net/dietsafe.html

www.freedietlinks.com/faddiets.htm

 $\underline{http://www.eatright.org/Public/NutritionInformation/92_nfs0200b.cfm}$

http://www.eatright.org/Public/NutritionInformation/92_nfs12.cfm

www.webterrace.com/fad/home.htm

NOTE TO TEACHER: Be sure to visit these sites first to familiarize yourself with them. You may want to add additional sites of your choice relating to other nutrition issues such as eating disorders, supplements, etc.